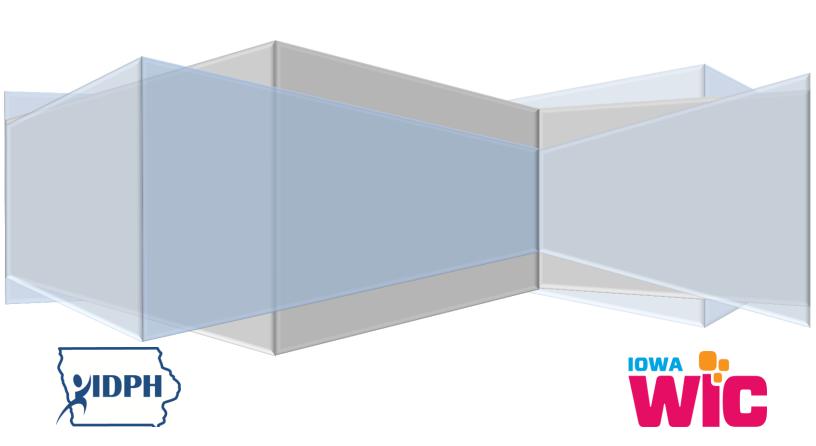
Extent of Food Insecurity Among Iowa WIC Participants 2011

lowa Department of Public Health

Jill Lange, MPH, RD, LD



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Introduction

For most lowans the worry about finding their next meal or feeding their family generally never crosses their mind, but for a certain population this is a constant struggle and concern. On average, from 2008-2010 there were 1,243,000 households in lowa. Of these, 12.1% lived with some form of food insecurity. This represents approximately 150,403 households in lowa.

Food security is defined as "access by all people at all times to enough food for an active, healthy life". Individuals or households are considered food secure if they have high or marginal food security. High food security is evidenced by in no reported indications of food access problems or limitations. 'Marginal food security' is defined as one or two reported indications which are typically anxiety over food sufficiency or shortage of food in the house and there is little or no indication of changes in diet or food intake. Food insecurity is defined by two categories, low food security or very low food security. Prior to 2006, 'low food security' was labeled as food insecurity without hunger and 'very low food security' was food insecurity with hunger. Low food security results in reports of reduced quality, variety or desirability of diet. There is little or no indication of reduced intake for this category. 'Very low food security' is defined as reports of multiple indications of disrupted eating patterns and reduced food intake.²

The Iowa Special Supplemental Nutrition Program for Women, Infants, and Children, also known as WIC, is a nutrition assistance program. WIC is designed to assist low income, nutritionally at risk infants, children under the age of 5, pregnant women, breastfeeding women, and postpartum women up to 6 months after birth by providing healthy foods, nutrition education and referrals to other health care agencies. In Iowa, WIC provides services to over 71,000 participants each month.

The Iowa WIC program has completed food security surveys with the WIC participants in 1997, 2000, 2003, and 2008. Different processes have been used to administer this survey including providing a survey at their appointment and mailing surveys to their homes. In 2008, surveys were distributed randomly at every WIC clinic across the state. The 2008 survey resulted in 56.93% of respondents as food secure, 27.98% with low food security, and 15.08% with very low food security.

Methodology

In 2011, the Iowa WIC program assessed the food security status of WIC participants using the same method used in 2008. All questions had been validated by the U.S. Household Food Security Survey with one minor adjustment requested and approved by the USDA Economic Research Service. This adjustment resulted in the separation of one question into two. In 2008 the question, "In the last 12 months, did you or other members in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?" was separated. The separation resulted in one question addressing skipping meals and a second question addressing cutting meals. This process was continued for 2011.

Surveys were distributed to local agencies representing 5% of their service population. This resulted in a total of 3,512 surveys provided for distribution. The agencies were instructed on how many surveys should be distributed at each clinic location. The surveys were then randomly offered to participants as they arrived to clinic for their appointment. Participating in the survey was completely voluntary for participants. Each agency distributed surveys until they were gone. All surveys were provided in both English and Spanish. Each agency then returned completed surveys, sealed in envelopes by the participants, to the state WIC office marked with their agency number.

Analysis

Results were tabulated using the data entry service Data Input Services, Inc. The Iowa Department of Public Health (IDPH) used the same process that was used in 2003 and 2008 to complete analysis using SPSS. Also as in 2003 and 2008, Mark Nord with the USDA Economic Research Services used Rasch Scaling to determine item discrimination and severity scores between the food security survey completed now and those completed in 2003 and 2008. By using this process, results could be compared with the Current Population Survey Food Security Supplement (CPS-FSS).

Demographics

3,479 surveys were returned to the state WIC office resulting in a 99% return rate. Two of the 20 WIC agencies had fewer than 100 surveys returned. Females continue to be the primary respondents of the survey at 96%. Almost 51% of survey respondents reported having a high school education or less while almost 48% had a technical or college level education. Respondents specified their race or ethnicity, almost 72% were white; 14% were Hispanic/Latino; and almost 7% were black/African American.

Economic Indicators

Employment status items indicated that in 19.2% of households no member of the household was employed. The 19.2% is an increase from 17% in 2008 and 15.1% in 2003. Only one person

2011 Iowa WIC Survey Indicator Set for Classifying Household Food-Security Status Level

- 1. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 12 months?
- 2. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 12 months?
- 3. In the last 12 months, did you or other members in your household ever cut the size of your meals because there wasn't enough money for food?
- 4. In the last 12 months, did you or other members in your household ever skip meals because there wasn't enough money for food?
- 5. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?
- 6. In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?

was employed in 53.6% of households which is a decrease from 55.4% in 2008 and similar to 53.4% in 2003. Two people were employed in 24.6% of households, which is an improvement from 22.8% in 2008, but still much lower than the 28.9% in 2003. When reporting income, almost 36% reported an income of less than \$10,000 as compared to almost 31% in 2008.

Almost 75% of respondents reported a household income of less than \$25,000, an increase from 68% in 2008.

Similar indicators have been tracked with WIC participants across the nation. In December 2011, the WIC Participant and Program Characteristics 2010 (PC 2010) for the nation were released by the USDA Food and Nutrition Services. Data from this report provided that "the average annualized income of families/economic units of persons enrolled in the WIC program in April 2012 was \$16,449, a decrease of \$86 (0.5 percent) since 2008. This small decrease is remarkable in that it is the first time the average income has dropped since 1992 (the oldest available PC data is from 1992). Since PC 2000, the average income has increased between 5.3 and 6.2 percent, with the exception of PC 2004 which was only 1.4 percent above the previous PC year – also the smallest increase since 1992."

Another interesting change in trends occurred this year regarding those participants making >=\$35,000. In 2003 7.3% and in 2008 7.4% of survey respondents indicated an income >=\$35,000. This percentage increased in 2011 to 9.1%. While we do not know the reason for an increase in participants at this economic level, there are assumptions that could be made. One possible assumption is the continued increased costs for food causing families to look for sources of assistance. The Consumer Price Index (CPI) is published by the Bureau of Labor Statistics (BLS) listing the general price changes for the U.S. economy. The measures are an average change in prices paid by urban consumers for a fixed market of goods and services including food. The CPI for food at home has increased 6.2% in October 2011 compared to October 2010. This is an increase of 5.2% for fruits and vegetables and an increase of 5.7% for baby foods.⁴

Price Increases⁴				
Food Item	October 2011	October 2010		
Eggs	\$1.87	\$1.46		
Milk (gallon)	\$3.62	\$3.32		
American Cheese (1 pound)	\$4.36	\$4.00		
Cheddar Cheese (1 pounds)	\$5.70	\$4.65		
Orange Juice (frozen 12 oz.)	\$2.75	\$2.46		
Peanut Butter	\$2.16	\$1.95		
(creamy – per pound)				
Beans (dried per pound)	\$1.40	\$1.31		
Whole Wheat Bread (pound)	\$2.04	\$1.74		

Household Food Security

The measurement of food security was determined by the number of affirmative responses to the seven food security questions asked. Low food security was determined if there was an affirmative response to two, three, or four of the questions. Very low food security resulted in an affirmative response to five or more of the questions. In 2003 and 2008 43% of respondents were determined to be food insecure and this number declined slightly to 41% in 2011. Of the 41%, 24.4% were identified to have low food security and 16.7% with very low food security. While the low food security is lower than the 2008 percentage of 27.98, there was an increase in very low food security from 15.08 (Figure 1).

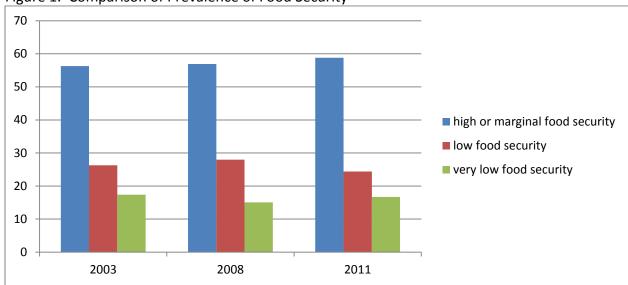


Figure 1. Comparison of Prevalence of Food Security

The food security status of white, Hispanic or Latino, and Black or African American respondents was compared and 35-42% of respondents in all groups were found to be food insecure. Over 23% of white respondents reported low food security and almost 19% had very low food security. Over 27% of Hispanic or Latino respondents had low food security and 7.3% with very low food security. Just over 25% of Black or African American respondents had low food security and almost 13% with very low food security.

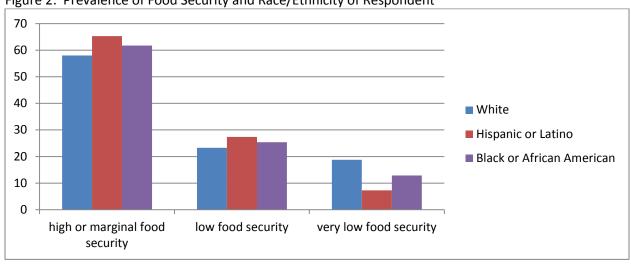


Figure 2. Prevalence of Food Security and Race/Ethnicity of Respondent

The extent of food insecurity in Iowa's WIC population from 2003 to 2011 has remained basically unchanged. When comparing the statewide data to the CPS-FSS data, food insecurity status in Iowa's WIC population is comparable to the national statistics.

Participation in Food Assistance Programs

Participation in food assistance programs, other than WIC, by respondents continues to change with each survey. In 2003, 39% of respondents did not participate in any other food assistance programs and in 2011 this number has decreased to 22%. Participation in the Food Assistance (Food Stamp) Program continues to make large increases; 2003 was 32%, 2008 was almost 50% and in 2011 it reached 62%. The School Lunch Program participation increased from over 25% in 2008 to 32% in 2011. Participation in the use of a food bank actually decreased from 7.5% in 2008 to 6.4% in 2011. This does remain slightly higher though than the 2003 level of 5.9%. It is unknown why participants reported a decrease in food bank usage.

2009 ARRA Funds and Increased SNAP Benefits

In 2009 the American Recovery and Reinvestment Act (ARRA) resulted in increased benefits for the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps). The act also expanded eligibility for jobless adults without children. The actual implementation of increased benefits occurred in April 2009.⁵ "The increase was implemented as a constant dollar amount for each household size, so the increase was 13.6 percent for households receiving the maximum benefit, and the percentage increase was greater for households that had some net income and were therefore eligible for less than the maximum benefit.⁵" The USDA compared data from late 2008 and late 2009 to determine if the benefit changes were successful in improving household food security. Data analyzed showed the following estimated changes.

"Among all low-income households, the prevalence of food insecurity fell by 2.2
percentage points, and the prevalence of very low food security fell by 2.0 percentage
points.⁵"

- "Participation of low-income households in SNAP increased by about 3 percentage points.⁵"
- "The SNAP benefits received by the typical (median) participating household increased by about 16 percent.⁵"
- "Food spending increased more among SNAP participants than among low-income non-SNAP households, closing a gap in food spending that had persisted since at least 2001.5"
- "The combination observed in 2009 of a simultaneous increase in SNAP participation and an improvement in food security from the previous year had not occurred in any other recent year.⁵"

While there is not any Iowa specific data related to this analysis, SNAP eligible Iowa WIC participants have benefited from the funding.

Conclusion

Food security is a basic need for all individuals but not always easily obtained. This survey was completed with Iowa WIC participants during a very difficult time. During the summer of 2011 western Iowa and bordering states experienced record flooding of the Missouri River. Since 2008 the nation and state has faced an extremely difficult economic down turn and unemployment rates have been holding around 6% within Iowa. Having enough food is a multifaceted situation involving more than just income and access.

The 2011 Iowa WIC survey showed many similar results to past surveys but increases that correlate with the poor economic situations many are facing. These results suggest that even with the majority of WIC families receiving another source of food assistance outside of WIC, specifically increased SNAP benefits, the struggle to find enough food persists. The status of food insecurity in Iowa is also similar to national trends that continue to show a need for continued efforts in solving food security issues.

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Iowa WIC Survey

Encuesta de WIC para el estado de Iowa

Iowa Department of Public Health Bureau of Nutrition August 2011

This survey will be used to improve the quality of WIC services for you and your family. All of your responses will be confidential, so please be honest in your answers. **We do not need your name**. Thank you for participating in the lowa WIC survey!

Section 1 asks about you and your family.

1.	What is your gender?(1) Female(2) Male
2.	What is your age?(1) Less than 20(2) 20-29(3) 30-39(4) 40 or more
3.	Are you (Check ALL that apply): (1) White(2) Hispanic or Latino(3) American Indian or Alaskan Native(4) Black/African American(5) Asian, Native Hawaiian or other Pacific Islander(7) Other
4.	How tall are you? feet inches
5.	About how much do you weigh? Pounds
6.	How many people are there in your household at this time (including yourself)?(1) 1

Esta encuesta será utilizada para mejorar la calidad de los servicios de WIC para usted y su familia. Todas sus respuestas son confidenciales, así que le solicitamos que sea honesta con sus respuestas. **No necesitamos saber su nombre**. Le agradecemos su participación en la encuesta de WIC para el estado de lowa.

La sección #1 pregunta acerca de usted y su familia.

1.	¿Cuál es su sexo? (1) Mujer (2) Hombre
2.	¿Qué edad tiene, usted? (1) Menos de 20 (2) 20-29 (3) 30-39 (4) 40 años o más
3.	¿Es usted (Seleccione TODOS los que aplican) (1) Blanco(2) Hispano o latino(3) Indio americano o nativo de Alaska(4) Negro/africano americano(5) asiático, hawaiano nativo u otro isleño pacifico(7) Otro
4.	¿Cuánto mide? piespulgadascentímetros
5.	¿Cuánto pesa aproximadamente? libras o kilogramos
6.	¿Cuántas personas viven en su hogar en este momento (incluyéndose a usted)?(1) 1

7.	Which programs are you or anyone in your household using right now? (Check ALL that apply) (1) Food Assistance (Food Stamps)(2) Head Start or Early Head Start(3) Food Bank or Food Pantry	7.	¿En cuáles programas está actualmente usted o cualquier familiar en su hogar participando? (Seleccione TODOS los que aplican)
8.	How many adults in your household are employed at this time (including full-time, part-time, seasonal, and self-employed)?(1) None(2) 1(3) 2(4) 3(5) More than 3	8.	¿Cuántos adultos en su hogar tienen empleo en estos momentos (incluyendo tiempo completo, tiempo parcial, de temporada y por cuenta propia)?(1) Ninguno(2) 1(3) 2(4) 3(5) Más de 3
9.	What is your highest level of education completed? (1) 8 th grade or less(2) 9 th to 11 th grade(3) High school diploma/GED(4) Technical school(5) Some college(6) College graduate or above	9.	¿Cuál es su nivel completo de educación más alto? (1) Grado 8 o menos(2) Grado 9 hasta 11(3) Diploma de secundaria/GED(4) Escuela Técnica(5) Algunas clases universitarias(6) Graduado de universidad o educación más elevada
10.	Are you:(1) Single, never married, NOT living with another adult(s)(2) Single, never married, but living with another adult(s)(3) Married(4) Divorced(5) Legally separated(6) Widowed	10.	¿Es usted:(1) Soltero, no se ha casado nunca, NO vive con otro(s) adulto(s)(2) Soltero, no se ha casado nunca, pero vive con otro(s) adulto(s)(3) Casado(4) Divorciado(5) Separado legalmente(6) Viudo
11.	In your household, is there a (Check ALL that apply): (1) Pregnant woman on WIC?(2) Breastfeeding woman on WIC?(3) Postpartum woman on WIC?(4) Infant on WIC (0 to 12 months old)?(5) Child on WIC (1 to 5 years old)?(6) None	11.	En su casa hay (Seleccione TODOS los que aplican): (1) ¿Alguna mujer embarazada que partícipe en el programa WIC?(2) ¿Alguna mujer que está amamantando y partícipe en el programa WIC?(3) ¿Alguna mujer posparto que partícipe en el programa WIC?(4) ¿Algún infante de (0 a 12 meses de edad) que partícipe en el programa WIC?(5) ¿Algún niño/a de (1 a 5 años de edad) que partícipe en el programa WIC?(6) Nadie participa en el programa de

Section 2 asks about your household food supply in the last 12 months. Please check the ONE BEST answer for each question.

12. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 12 months? (1) Often true(2) Sometimes true(3) Never true(4) I don't know	12. "La comida que compramos no duró lo suficiente y no teníamos dinero para comprar más." En los últimos 12 meses, ¿sucedió esto en su hogar?(1) Frecuentemente(2) A veces(3) Nunca(4) No lo sé
 13. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 12 months?(1) Often true(2) Sometimes true(3) Never true(4) I don't know 	13. "Nosotros no teníamos dinero para una dieta balanceada (nutritiva)." Para su casa, en los últimos 12 meses, ¿sucedió esto en su hogar?(1) Frecuentemente(2) A veces(3) Nunca(4) No lo sé
 14. In the last 12 months, did you or other members in your household ever cut the size of your meals because there wasn't enough money for food? (1) Yes (2) No (3) I don't know 	 14. ¿En los últimos 12 meses, usted u otro familiar en su hogar redujeron el tamaño de sus comidas porque no hubo suficiente dinero? (1) Sí (2) No (3) No lo sé
 15. In the last 12 months, did you or other members in your household ever skip meals because there wasn't enough money for food? (1) Yes (2) No (3) I don't know 	 15. ¿En los últimos 12 meses, alguna vez usted u otro familiar en su hogar ha dejado de desayunar, almorzar o cenar porque no hubo suficiente dinero para la comida? (1) Sí(2) No(3) No lo sé
 16. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food? (1) Yes (2) No (3) I don't know 	16. En los últimos 12 meses, ¿Alguna vez comió usted menos de lo que pensaba que debía porque no hubo suficiente dinero para la comida? (1) Sí (2) No (3) No lo sé
 17. In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food? (1) Yes(2) No(3) I don't know 	17. En los últimos 12 meses, ¿Alguna vez tuvo hambre pero no comió porque no hubo suficiente dinero para la comida? (1) Sí (2) No (3) No lo sé

La sección #2 pregunta acerca del inventario

de alimentos en su hogar durante los últimos

12 meses. Por favor seleccione LA MEJOR

respuesta para cada pregunta.

Section 3 will help us improve our services for you.	La sección #3 nos ayudará a mejorar nuestros servicios para usted.
18. How do you pay for groceries that are not WIC eligible (Check ALL that apply)? (1) Food Assistance (Food Stamps)(2) Cash(3) Check or debit card(4) Credit card(5) Don't have money to buy other food	18. ¿Cómo paga por los alimentos que no son elegibles para WIC (marque TODO lo que corresponda)? (1) Food Assistance (Asistencia Alimenticia) (2) En efectivo (3) Tarjeta de cheques o de débito (4) Tarjeta de crédito (5) No tengo dinero para comprar otros alimentos
19. How much income do you expect your household to get this year from all sources, including wages, social security, public assistance, and all other cash income?(1) \$0 - \$4,999(2) \$5,000 - \$9,999(3) \$10,000 - \$14,999(4) \$15,000 - \$24,999(5) \$25,000 - \$34,999(6) \$35,000 and over	19. ¿Cuantos ingresos espera usted recibir en su casa este año de todos los recursos, incluyendo sueldos, seguro social, asistencia pública, y otros ingresos en efectivo?(1) \$0 - \$5,000(2) \$5,000 - \$9,999(3) \$10,000 - \$14,999(4) \$15,000 - \$24,999(5) \$ 25,000 - \$34,999(6) \$35,000 y más
 20. If you could complete nutrition education on the internet, would that be useful? (1) Yes (2) No (3) I do not have access to the internet 	20. Si pudiera completar una educación sobre nutrición en Internet, ¿le sería útil?(1) Sí(2) No(3) No tengo acceso a Internet
 21. If policy allowed, would you want the WIC agency to text appointment reminders or health information to your cell phone? (1) None(2) Appointment reminders only(3) Health information only(4) Both appointments and health information 	21. Si las normas lo permitieran, ¿desearía que la agencia de WIC le enviara recordatorios de citas o información sobre la salud por texto a su teléfono móvil? (1) Ninguno(2) Recordatorios de citas solamente(3) Información sobre la salud solamente(4) Citas e información sobre la salud
22. In general, how would you rate the services you have received from WIC (Check ONE)?(1) Excellent(2) Good(3) Fair(4) Poor	22. En general, ¿cómo calificaría los servicios que usted ha recibido de WIC? (Seleccione UNO)(1) Excelente(2) Bueno(3) Regular(4) Mal
23. Please write any comments or suggestions to help us serve you better.	23. Sírvase escribir cualquier comentario o sugerencia que nos ayude a servirle mejor.

Thank you for your participation in the lowa WIC Survey! Please return your completed survey in the provided envelope. ¡Gracias por su participación en la Encuesta de WIC para el estado de lowa! Favor de retornar su encuesta terminada en el sobre. Table 1. Race/Ethnicity

Race/Ethnicity	2011	2008	2003
White	72.4%	70.9%	80.7%
Hispanic or Latino	13.7%	15.5%	12.4%
American	0.8%	1.1%	0.5%
Indian/Alaskan Native			
(<100 responses)			
Black/African American	6.9%	6.6%	3.0%
Asian, Native Hawaiian	0.9%	1.1%	2.4%
or other Pacific Islander			
(<100 responses)			
Other (<100 responses)	0.3%	0.8%	0.9%

Table 2. WIC Participants in Household

WIC Participant Type in Household	2011	2008	2000
Pregnant	13.5%	14.5%	13.5%
Breastfeeding	9.3%	9.4%	11.8%
Postpartum	8%	9.0%	15.3%
Infant	36.4%	37.9%	42.4%
Child	67%	70.2%	69.6%
None	3.8%		

Table 3. Family/Economic Unit Size

Number of people in household	2011	2008
1	0.9%	1.2%
2	13.6%	11.6%
3	26.2%	26.2%
4	27%	26.8%
5	17.5%	17.9%
6	8.9%	8.5%
7	3.2%	3.5%
8	1.6%	1.2%
More than 8	0.9%	1.0%

Table 4. Number of People Employed in Household

People employed in household	2011	2008	2003
None	19.2%	17%	15.1%
1	53.6%	55.4%	53.4%
2	24.6%	22.8%	28.9%
3	2%	1.8%	1.9%
More than 3	0.6%	0.6%	0.7%

Table 5. Household Income

Household Income	2011	2008	2003
\$0-4,999	22.7%	18.2%	15.4%
\$5,000-9,999	13.1%	12.6%	13.7%
\$10,000-14,999	15.1%	13.9%	16.1%
\$15,000-24,999	23.7%	23.2%	28.1%
\$25,000-34,999	16.2%	16.9%	19.3%
\$>=35,000	9.1%	7.4%	7.3%

Table 6. Education Completed by Survey Respondent

Highest grade level completed by respondent	2011	2008	2003
< 8 th grade	3.8%	4.8%	5.8%
9 th to 11 th grade	14%	15.2%	12.4%
High school/GED	33.6%	34.6%	34.8%
Technical	2.7%	3.0%	4.1%
Some college	27.9%	26.9%	27%
College graduate or more	17.6%	13.0%	15.9%

Table 7. Marital Status

Marital status	2011	2008	2003	2000
Never married,	23.4%	29.7%	18.3%	33.3%
not with other				
adults(s)				
Never married	23.3%	16.8%	15.8%	
and with other				
adult(s)				
Married	42.1%	40.7%	57.9%	56.2%
Divorced	7.2%	7.1%	5.7%	8.6%
Separated	3%	2.2%	2%	
Widowed	0.3%	0.3%	0.3%	0.4%
Missing				1.5%

Table 8. Gender of Survey Respondents

Gender	2011	2008	2003	2000
Female	96.2%	96.0%	97.8%	98.2%
Male	3.8%	2.8%	2.2%	1.2%

Table 9. Age of Survey Respondents

Age	2011	2008	2003	2000
<20 years	7.3%	8.6%	7.3%	8.4%
20-29 years	57%	59.1%	58.3%	54.6%
30-39 years	29.5%	26.0%	27.7%	26.2%
>40 years	6.1%	4.8%	6.7%	4.8%

Table 9. Participation in Other Food Assistance Programs

Other Programs	2011	2008	2003	2000
Food Stamps	62.1%	49.6%	32.4%	27%
HeadStart	10.9%	10.8%	14.2%	11.6%
Food Bank	6.4%	7.5%	5.9%	6.0%
SHARE	0.3%		0.9%	1.2%
CSFP	0.4%		0.7%	
School Lunch	32.1%	25.5%	29.8%	
School Breakfast	15.8%	13.0%	14.3%	
CACFP	2.2%		2.7%	
FIP	10.6%	8.5%	10.6%	15.0%
Do Not Use	22.2%		39.1%	32.9%

Table 10. Quality of WIC Service

Quality	2011	2003	2000
Excellent	77.7%	48.4%	49.3%
Good	20.5%	43.1%	42.5%
Fair	1.7%	8%	7%
Poor	0.1%	0.5%	0.8%

Table 11. BMI

BMI	2011	2008	2003
<19	2.6%	12.4%	3.4%
Underweight			
19-25	35%	32.7%	42.3%
Healthy weight			
26-29	20.5%	19.3%	27.1%
Overweight			
>30	41.9%	35.6%	27.2%
Obese			

Table 12. Payment for non-WIC Foods

Payment Source	2011
Food Assistance	59.7%
Cash	54.1%
Check or debit	35.8%
Credit	6.6%
Don't have money	2.6%

Table 13. Interest in Internet Based Nutrition Education

Interest in Use	2011
Yes	51.8%
No	25.3%
I do not have access to the internet	22.7%

Table 14. Interest in Receiving Appointment Reminders or Health Information Text

Messages

Text Message Interest	
Appointment Only	44.8%
Health Information Only	0.4%
Appointment and Health Information	32.2%
None	22.5%

Q1. Gender	Household Food Security (%)								
Gender	High or marginal food Low food security security		Very low food security						
	2008	2011	2008	2011	2008	2011			
Female	58	58.9	25.8	24.6	16.3	16.5			
Male	59.5	56.8	28.6	20.7	11.9	22.5			

Q2. Age		Household Food Security (%)								
	High or ma	rginal food	Low food	l security	Very low for	od security				
	security									
	2008 2011		2008	2011	2008	2011				
<20 years	63.3	63	22.3	18.5	14.4	18.5				
20-29 years	57.7	58.4	25.8	25.3	16.5	16.4				
30-39 years	55.6	58.8	27.9 25		16.5	16.2				
>40 years	63	56.8	22.6	21.6	14.4	21.6				

Q3. Race/Ethnicity	Household Food Security (%) * = <100								
Race/Etimicity	High or marginal food security			rginal food Low food security			Very low food security		
	2003	2008	2011	2003	2008	2011	2003	2008	2011
White	55.7	57.9	58	25.5	24.9	23.3	18.7	17.2	18.8
Hispanic or Latino	59.1	58.1	65.3	32	30.3	27.4	8.9	11.5	7.3
American Indian/Alaskan Native	50	58.8*	45.5*	28.6	26.5*	40.9*	21.4	14.7*	13.6*
Black/African American	53.8	59	61.7	26.4	26.7	25.4	19.8	14.3	12.9
Asian, Native Hawaiian or other Pacific Islander	63.9	62.5*	57.7*	19.4	28.1*	26.9*	16.7	9.4*	15.4*
Other*		50	62.5		28.6	12.5		21.4	25

Q6. Number of people in	Household Food Security (%)									
household	High o	r margir security		Low	food sec	curity	Very low food security			
	2003	2008	2011	2003	2008	2011	2003	2008	2011	
1	45	44.7	51.9	25	28.9	25.9	30	26.3	22.2	
2	50.2	59.7	53.2	30.2	23.7	28.1	19.6	16.6	18.7	
3	54.1	56.3	56.4	25.3	26.8	25.7	20.7	16.9	18	
4	58.4	57.6	63.6	26	26.6	21.4	15.6	15.8	14.9	
5	59.5	60.3	57	24.9	25	25.9	15.6	14.6	17.1	
6	54.8	63.2	60.6	27.8	23.4	26.3	17.4	13.4	13.1	
7	53	54.7	70.2	32	24.5	16	15	20.8	13.8	
8	70.5	56.8	57.4	18.2	24.3	17	11.4	18.9	25.5	
More than 8	51.5	46.7	55.6	30.3	33.3	18.5	18.2	20	25.9	

Q7.			Н			ecurity (<mark>%)</mark>			
Participation in other	TT! _1	* = <100 respondents High or marginal food Low food security Very low food security								
in other	High o	High or marginal food			100a sec	curity	very ic	ow 100a s	security	
programs	2003	security 2008	2011	2003 2008 2011			2003	2008	2011	
Food Stamps	51.2	56.2	56.5	27.8	25.5	25.1	21	18.3	18.4	
Head Start	54	58.3	61.6	29.1	26.9	21.4	17	14.8	17	
Food Bank	32	33.9	36.6	27.5	31.3	24.2	40.4	34.8	39.2	
SHARE*	50	39.3	30.0	30.8	32.1	60	19.2	28.6	10	
CSFP*	45.5	12.5	27.3	36.4	37.5	18.2	18.2	50	54.5	
School Lunch	53.3	57.2	54.8	26.7	26.3	25.5	20	16.5	19.7	
School	51.3	53.1	52.8	26	28	24.3	22.7	18.9	22.8	
Breakfast										
CACFP*	58.8	47.4	54	25	42.1	25.4	16.3	10.5	20.6	
FIP	55.3	56.3	60.5	23.8	22.6	22.7	20.9	21.1	16.8	
Do not use	60.1	60.4	63.6	25.1	26.3	24	14.8	13.3	12.4	

Q8. Number of people		Household Food Security (%) * = <100 respondents High or marginal food Security Security * Example 100 Security									
employed within	High o										
household	2003	2008	2011	2003	2008	2011	2003	2008	2011		
None	55	54.7	57.7	24.3	24.9	24.6	20.8	20.4	17.6		
1	53.9	57.7	57.1	27.8	26.7	25.9	18.2	15.6	17		
2	60	61	63.4	24.7	24.1	21.1	15.3	14.9	15.5		
3*	60.3	58.9 71.2 34.5 26.8 18.6 5.2 14.3 10.2									
More than 3*	79.2	68	52.9	11.4	14.9	23.5	18.8	12.2	23.5		

Q9. Education level of		Household Food Security (%) * = <100 respondents									
respondent	_	arginal food arity	Low food	l security	Very low food security						
	2008	2011	2008	2008	2011						
< 8 th grade	51	67	36.7	27.5	12.2	5.5					
9 th to 11 th grade	59.4	66.3	27	20	13.6	13.8					
High school/GED	60.6	61.8	23.8	21.6	15.5	16.6					
Technical*	56	55.1	55.1 27.5 26.9 16.5								
Some college	54.5	51.9	51.9 25.9 27.9 19.6 20.2								
College graduate	60.3	57.8	23.9	26.7	15.8	15.5					

Q10. Marital status of		Household Food Security (%) * = <100 respondents									
respondent	High or marginal food security			Low	Low food security			Very low food security			
	2003	2008	2011	2003	2008	2011	2003	2008	2011		
Never married, not with other adult(s)	56.2	60.7	61.6	26.3	23.6	24.1	17.5	15.7	14.2		
Never married and with other adult(s)	47	53.1	57.6	30	27.7	22.6	23	19.1	19.8		
Married	59.4	59.1	60.2	25.3	26.9	25.3	15.3	14	14.5		
Divorced		55	52.5		22.9	24.6		22	23.2		
Separated*		43.9	43.7		28.8	28.7		27.3	27.6		
Widowed*		75	50		25	50		0	0		

Q11. WIC participant types	Household Food Security (%)									
in household	High o	r margir		Low	food sec	urity	Very low food security			
	2003	2008	2011	2003	2008	2011	2003	2008	2011	
Pregnant	49.9	50.8	55.7	29.3	30	27	20.8	19.2	17.3	
Breastfeeding	57	55.9	53.1	28	26.4	29.2	15.1	17.7	17.7	
Postpartum	50.8	57.8	51.9	26	22.9	27	23.2	19.3	21	
Infant	53.8	60.3	59.9	27	24.6	24.4	19.2	15.1	15.8	
Child	58.2	57.9	60.1	25.9	26	23.5	15.9	16.1	16.5	

Q18. Payment source for non-WIC foods	Household Food Security (%) * = <100 respondents							
2011	High or marginal food security	Very low food security						
Food Assistance	56.6	24.9	18.5					
Cash	56.8	24.9	18.4					
Check or debit	62.4	22.4	15.2					
Credit	56	27.5	16.6					
Don't have money*	24.7	26	49.4					

Q19. Household income		Household Food Security (%)									
	High o	igh or marginal food									
		security									
	2003	2008	2011	2003	2008	2011	2003	2008	2011		
\$0-4,999	53.3	54.2	60.7	28	27.3	21.9	18.7	18.5	17.4		
\$5,000-9,999	49.2	56	54.7	27.6	24.7	24.3	23.2	19.3	20.9		
\$10K-14,999	46.6	51.9	51.9	29.5	26.5	31.1	23.9	21.6	17		
\$15K-24,999	52.8	58.9	55.8	27.6	26.1	25	19.6	15	19.2		
\$25K-34,999	64.1	60.7	57.6	23.6	26.4	26.9	12.3	13	15.6		
>\$35K	78.4	71.8	74	17.8	17.6	14.8	3.8	10.6	11.2		

Q20. Usefulness of online nutrition	Household Food Security (%)							
education 2011	High or marginal food security	Low food security	Very low food security					
Yes	61.8	23.9	14.3					
No	60.9	22.7	16.4					
I do not have access to the internet	50.4	26.6	23					

Q21. Participant agreement to receiving	Household Food Security (%) * = <100 respondents							
text messages 2011	High or marginal food security	Low food security	Very low food security					
Appointment reminder only	59.5	23.9	16.6					
Health information only	54.5	36.4	9.1					
Appointment reminder and health information	55.2	25.1	19.7					
None	62.9	23.3	13.8					

Q22. Rate of WIC service		Household Food Security (%) * = <100 respondents										
	_	igh or marginal food Low food security security Security Very low food security										
	2008	2008 2011 2008 2011 2008 2011										
Excellent	59.5	60	25	23.9	15.5	16.2						
Good	55	55.9	27.5	25.3	17.4	18.8						
Fair*	42.4	42.4 41.7 37.3 31.3 20.3 27.1										
Poor*	100	0	0	100	0	0						

Household						BMI	(%)						
Food Security	<19 Underweight			19-2	19-25 Healthy			26-29 Overweight			>30 Obese		
					Weight								
	2003	2008	2011	2003	2008	2011	2003	2008	2011	2003	2008	2011	
High or marginal food security	3.7	3.5	2.6	43.7	38.6	36.5	26.8	22.6	20.8	25.8	35.4	40.1	
Low food security	2.7	2.1	1.7	40.6	38.3	32.8	30.1	21.8	21.2	26.6	37.8	44.3	
Very low food security	3.4	3.6	3.9	40.3	35	33.2	23.7	20.8	18.7	32.6	40.6	44.3	

Q7.		Q19. Household Income (%)										
Program	\$0-4,9	999	\$5K-9	9,999	\$10K	-	\$15K	_	\$25K	-	>\$351	K
participation					14,99	9	24,99	9	34,99	9		
	'08	' 11	'08	' 11	'08	' 11	'08	' 11	608	' 11	608	' 11
Food Stamps	28.6	32	18	17.3	17.7	18.2	19.4	21.8	6.9	8.2	1.7	2.5
Head Start	23.1	30.7	16	16.7	14.7	17.6	22	22.6	14.7	7.7	4.3	4.8
Food Bank	31.2	30.6	15.8	13.7	15.4	15.1	18.4	23.7	12.4	12.8	2.6	4.1
School	13.3	18.3	12.5	12.5	13.4	15.7	25.9	25.2	22.3	19.6	7.4	8.6
Lunch												
School	16	18.6	13.1	13.1	14.4	15.6	25.3	26.1	21.5	19.2	5.1	7.3
Breakfast												
FIP	36.2	51.9	27.9	26.1	12	12.8	14	6.7	2.7	1.2	1.3	1.4
Do not use	9.9	10.9	8.3	7.8	10.6	8.9	26.1	26.6	24.6	26.9	12.6	18.1

Extent of Food Insecurity Among Iowa WIC Participants 2011

lowa Department of Public Health





Food Security and the <Insert Agency Name> WIC Program

For most lowans the worry about finding their next meal or feeding their family generally never crosses their mind, but for a certain population this is a constant struggle and concern. On average from 2008-2010 there were 1,243,000 households in lowa. Of these, 12.1% lived with some form of food insecurity. This represents approximately 150,403 households in lowa.¹

The Iowa Special Supplemental Nutrition Program for Women, Infants, and Children, also known as WIC, is a nutrition assistance program. WIC is designed to assist low income, nutritionally at risk infants, children under the age of 5, pregnant women, breastfeeding women, and postpartum women up to 6 months after birth by providing healthy foods, nutrition education and referrals to other health care agencies. In Iowa, WIC provides services to over 71,000 participants each month. <Insert Agency Name> provides WIC services to approximately <insert active participation #> each month in the following counties: <insert county names>.

Demographics

Females continue to be the primary respondents of the survey with more than <#> percent from <insert agency name> answering the survey. Employment status resulted in <#> percent of households with no members employed, <#> percent with 1 person employed and <#> percent with 2 people in the household employed. When reporting income, almost <#> percent reported an income of less than \$10,000 and almost <#> percent reported a household income of less than \$25,000. Almost <#> of survey respondents reported having a high school education or less while almost <#> percent had technical or college level education. Race or ethnicity of the respondents was made up of almost <#> percent being white; almost <#> percent reported Hispanic/Latino; and almost <#> percent were Black/African American.

Household Food Security

More than <#> percent of the respondents were food insecure, <#> percent with low food security, and <#> percent with very low food security. Approximately <#> percent of respondents were food secure. <Insert graph of food security rates for local agency.<

2011 Iowa WIC Survey Indicator Set for Classifying Household Food-Security Status Level

- 1. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 12 months?
- 2. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 12 months?
- 3. In the last 12 months, did you or other members in your household ever cut the size of your meals because there wasn't enough money for food?
- 4. In the last 12 months, did you or other members in your household ever skip meals because there wasn't enough money for food?
- 5. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?
- 6. In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?

Conclusion

Food security is a basic need for all individuals but not always easily obtained. This survey was completed with Iowa WIC participants during a very difficult time. During the summer of 2011 western Iowa and bordering states experienced record flooding of the Missouri River. Since 2008 the nation and state has faced an extremely difficult economic down turn and unemployment rates have been holding around 6% within Iowa. Having enough food is a multifaceted situation involving more than just income and access.

The 2011 Iowa WIC survey showed many similar results to past surveys but increases that correlate with the poor economic situations many are facing. These results suggest that even with the majority of WIC families receiving another source of food assistance outside of WIC, specifically increased SNAP benefits, the struggle to find enough food persists. The status of food insecurity in Iowa is also similar to national trends that continue to show a need for continued efforts in solving food security issues.

References:

1. Coleman-Jensen, Alisha, Mark Nord, Margaret Andrews, and Steven Carlson. *Household Food Security in the United States in 2010.* ERR-125, U.S. Dept. of Agriculture, Econ. Res. Serv. September 2011

Table 1. Household Food Security (%)

Agency	High or marginal food security	Low food security	Very low food security
31	51.7	27.8	20.5
33*	60.7	22.6	16.7
34	54.3	29.3	16.5
35	74.5	15.7	9.8
36	50.5	28.2	21.3
37*	63.4	22.6	14
38	54.7	29.1	16.2
39*	58.2	28.6	13.2
41	59.7	24.8	15.5
42*	70	17.5	12.5
43	58.6	21.9	19.5
45	65.9	23.3	10.9
46	58.2	24.6	17.2
47	68	20	12
48	69.8	17.9	12.3
49	48.4	28.6	23.1
50*	64.7	24.7	10.6
51	48	29.4	22.5
52	63.7	18.5	17.7
53*	75.9	12.6	11.5

Table 2. Race/Ethnicity (%)

Agency	White	Hispanic/Latino	Black/African American	Asian	Other or N/A	American Indian/Alaskan Native
31	58.8	20.3	14	1.2	0.5	0
33*	80.7	13.3	2.4	1.2	2.4	0
34	78	4.9	8.5	0.6	7.9	0
35	79.7	5.9	11.1	0	2.6	0.7
36	68.2	3.5	16.4	2	9	1
37*	77.4	15.1	1.1	2.2	4.3	0
38	69.6	16.2	3.6	1.6	5.7	3.2
39*	65.9	31.9	1.1	0	1.1	0
41	88.4	6.2	1.6	0.8	3.1	0
42*	92.5	5	0	0	2.5	0
43	68.7	7.9	14.5	0	8.8	0
45	76.7	14	3.9	0.8	4.7	0
46	82.8	9.8	1.6	1.6	4.1	0
47	67	29	0	0	4	0
48	79.2	15.1	0.9	0	4.7	0
49	58.2	28	2.2	5.5	1.1	4.9
50*	85.9	4.7	2.4	0	5.9	1.2
51	56.9	17.6	17.6	2	4.9	1
52	79	14.5	0.8	0.8	4.8	0
53*	96.6	1.1	0	0	2.3	0

Table 3. Family Size – Number of people in household (%)

Agency	1	2	3	4	5	6	7	8	>8
31	1.2	15	22.3	16.4	17.2	11.6	2.7	1.2	2.2
33*	0	13.1	21.4	31	19	8.3	6	1.2	0
34	1.2	20.7	31.1	22	15.2	6.7	2.4	0.6	0
35	2.6	15	32	22.9	14.4	9.2	2.6	0.7	0.7
36	0.5	20.8	29.2	26.7	10.4	9.9	1.0	0.5	1
37*	0	8.6	22.6	29	23.7	11.8	4.3	0	0
38	2	10.1	29.6	27.5	16.2	7.7	2.8	2.8	0.8
39*	1.1	7.7	16.5	22	25.3	16.5	6.6	3.3	0
41	0.8	16.3	21.7	30.2	14	8.5	5.4	1.6	1.6
42*	0	5	23.8	32.5	22.5	12.5	2.5	1.3	0
43	0	12.6	24.2	30.2	21.4	6	3.3	0.9	1.4
45	0.8	13.2	28.7	29.5	20.2	7	0.8	0	0
46	2.5	14.8	31.1	27	18	2.5	1.6	1.6	0.8
47	0	8	26	28	26	8	2	1	1
48	0.9	7.5	26.4	28.3	15.1	12.3	7.5	0.9	0.9
49	0	9.9	29.3	23.2	19.9	8.3	5	3.9	0.6
50*	1.2	21.2	27.1	21.2	15.3	9.4	3.5	1.2	0
51	1	12.7	31.4	28.4	16.7	8.8	0	1	0
52	0.8	13.7	25.8	29	13.7	6.5	4	4.8	1.6
53*	0	16.1	19.5	28.7	16.1	8	5.7	4.6	1.1

Table 4. Number employed in household (%)

Agency	None	1	2	3	More than 3
31	21.8	58.6	14.7	3.4	1.5
33*	13.1	64.3	21.4	1.2	0
34	29.4	49.7	19	1.8	0
35	17.6	53.6	26.8	2	0
36	25.2	54	17.3	2.5	1
37*	11.8	47.3	38.7	1.1	1.1
38	20.3	51.6	27.2	0.8	0
39*	12.1	50.5	33	4.4	0
41	10.1	56.6	31	1.6	0.8
42*	11.3	51.3	36.3	1.3	0
43	20.2	49.3	29.1	0.9	0.5
45	20.9	52.7	24	2.3	0
46	21.7	53.3	25	0	0
47*	16.2	47.5	34.3	2	0
48	13.5	61.5	18.3	4.8	1.9
49	17.2	58.9	21.7	1.7	0.6
50*	15.3	55.3	29.4	0	0
51	22.8	48.5	24.8	4	0
52	24.2	46	26.6	1.6	1.6
53*	14.9	52.9	28.7	2.3	1.1

Table 5. Household income (%)

(* = <100 respondents)

Agency	\$0-4,999	\$5,000-9,999	\$10,000-14,999	\$15,000-24,999	\$25,000-34,999	>=\$35,000
31	21.6	16.4	14.8	25.6	13.7	7.9
33*	19	10.1	16.5	32.9	10.1	11.4
34	29	9.7	20	19.4	14.2	7.7
35	21.6	16.9	18.9	18.2	14.2	10.1
36	25.8	11.6	18.4	20.5	16.8	6.8
37*	15.7	10.1	20.2	22.5	21.3	10.1
38	20.2	10.7	15.5	24.5	18.5	10.7
39*	12.2	12.2	9.8	25.6	28	11
41	21	12.1	10.5	23.4	20.2	12.9
42*	22.4	11.8	14.5	19.7	17.1	14.5
43	20.1	14.2	15.2	25.5	15.7	9.3
45	23.4	18.5	10.5	24.2	11.3	12.1
46	32.2	16.1	8.5	23.7	11.9	7.6
47*	25.6	10.5	14	26.7	15.1	8.1
48*	17.7	14.6	13.5	31.3	13.5	8.3
49	21.2	13.5	15.3	22.4	20.6	7.1
50*	26.8	7.3	13.4	19.5	19.5	13.4
51*	26.3	12.1	12.1	24.2	21.2	4
52	29.2	9.7	17.7	23.9	15	4.4
53*	23.3	14	17.4	20.9	11.6	12.8

Table 6. Education completed by survey respondents (%)

Agency	<=8 th grade	9 th – 11 th grade	High School	Technical	Some college	>=College
			or GED			
31	4.6	17.6	30.5	2.7	26.8	17.8
33*	1.2	16.7	29.8	7.1	23.8	21.4
34	2.5	12.3	30.1	1.2	37.4	16.6
35	2.6	21.1	34.2	1.3	26.3	14.5
36	1.5	10.4	27.9	3	34.3	22.4
37*	4.3	14.1	41.3	1.1	26.1	13
38	3.3	13.5	31	3.3	26.5	22.4
39*	13.2	11	28.6	7.7	18.7	17.6
41	1.6	14.7	29.5	3.9	27.9	22.5
42*	7.6	7.6	45.6	1.3	22.8	15.2
43	2.4	9	37.3	1.4	31.1	17.9
45	0.8	17.8	38	1.6	24.8	17.1
46	2.5	10.7	34.4	0.8	30.3	19.7
47*	8.1	15.2	38.4	4	22.2	10.1
48	1.9	11.4	44.8	1	27.6	12.4
49	9.4	12.2	35.9	3.3	27.1	12.2
50*	1.2	11.8	28.2	4.7	35.3	18.8
51	4	12.9	28.7	3	23.8	27.7
52	3.2	25	34.7	2.4	23.4	11.3
53*	1.1	9.2	37.9	2.3	33.3	16.1

Table 7. Marital status

Agency	Never married, not with other adult(s)	Never married and with other adult(s)	Married	Divorced	Separated	Widowed
31	28.6	21.8	37.9	5.1	6.1	0.5
33*	17.3	22.2	50.6	7.4	2.5	0
34	27.6	26.4	36.2	6.1	3.1	0
35	33.3	31.4	25.5	6.5	2.6	0.7
36	29.9	26.9	31.3	8	3	1
37*	18.3	28	46.2	5.4	2.2	0
38	19.3	22.5	49.6	5.7	2	0.4
39*	7.7	17.6	68.1	3.3	3.3	0
41	18.6	21.7	49.6	8.5	1.6	0
42*	15	20	56.3	6.3	1.3	1.3
43	24.1	20.8	41	10.8	3.3	0
45	20.5	31.5	37	7.9	3.1	0
46	22.1	24.6	44.3	6.6	2.5	0
47*	12.1	30.3	49.5	8.1	0	0
48	17.3	27.9	38.5	13.5	1.9	1
49	24.4	20	44.4	7.2	3.9	0
50*	31.8	22.4	32.9	11.8	1.2	0
51	25	20	45	6	3	1
52	27.9	20.5	42.6	6.6	1.6	0
53*	19.5	23	46	6.9	3.4	1.1

Table 8. Gender of survey respondents (%)

Agency	Female	Male
31	95.9	4.1
33*	94	6
34	92.7	7.3
35	96.7	3.3
36	95	5
37*	97.8	2.2
38	93.9	6.1
39*	100	0
41	97.7	2.3
42*	93.8	6.3
43	98.6	1.4
45	98.4	1.6
46	98.4	1.6
47	99	1
48	99.1	0.9
49	95.1	4.9
50*	95.3	4.7
51	93.1	6.9
52	95.2	4.8
53*	97.7	2.3

Table 9. Age of survey respondents (%)

(* = <100 respondents)

Agency	< 20 years	20-29 years	30-39 years	> = 40 years
31	8.9	53.1	30.9	7
33*	2.4	52.4	34.5	10.7
34	7.3	62.2	25.6	4.9
35	8.6	56.6	30.3	4.6
36	4.5	61.9	27.7	5.9
37*	8.6	57	30.1	4.3
38	6.5	52.8	36.6	4.1
39*	6.7	55.1	32.6	5.6
41	6.3	53.1	30.5	9.4
42*	6.3	52.5	35	6.3
43	4.7	62.8	27.4	5.1
45	8.6	59.4	29.7	2.3
46	9	55.7	29.5	5.7
47	8	64	22	5
48	6.6	59.4	26.4	7.5
49	7.2	56.4	30.9	5.5
50*	7.1	63.5	18.8	10.6
51	5.9	57.8	29.4	6.9
52	8.9	58.9	26.6	5.6
53*	14	48.8	27.9	9.3

Table 10. BMI of Survey Respondents (%)

(* = <100 respondents)

Agency	<19	19-25	26-29	> 40
31	2.2	33.6	23.2	41
33*	3.9	27.3	26	42.9
34	3.3	34.7	13.3	48.7
35	3.5	31.9	24.1	40.4
36	3.7	39.7	18	38.6
37*	1.2	36.5	15.3	47.1
38	1.3	39.3	21.4	38
39*	2.5	37.5	10	50
41	3.4	33.9	20.3	42.4
42*	2.7	32.4	24.3	40.5
43	3.6	34.5	18.3	43.7
45	0.8	32.3	16.9	50
46	1.8	32.7	19.5	46
47*	2.2	33	24.2	40.7
48*	0	49	23.5	27.6
49	4.3	32.7	21.6	41.4
50*	2.5	31.6	12.7	53.2
51*	3.2	30.9	26.6	39.4
52	3.7	32.7	28	35.5
53*	1.2	42.2	19.3	37.3

Table 11. Interest in internet based nutrition education

Agency	Yes	No	No access to internet
31	49.4	26.3	24.3
33*	52.4	26.2	21.4
34	52.9	28	18.5
35	45.4	34.9	19.1
36	58	20.5	21.5
37*	39.8	26.9	33.3
38	52.9	23.6	23.6
39*	51.6	22	26.4
41	52.7	25.6	21.7
42*	32.5	43.8	23.8
43	56.1	24.5	19.3
45	46.1	28.1	25
46	43.7	25.2	31.1
47*	55.1	18.4	26.5
48	45.7	23.8	30.5
49	57.6	22.6	19.2
50*	52.9	31.8	15.3
51	68.3	18.8	12.9
52	56.2	18.2	25.6
53*	58.6	24.1	17.2

Table 12. Interest in receiving appointment reminders or health information text messages

Agency	Appointment Only	Health Information Only	Appointment and Health Information	None
31	45.2	1	32.3	21
33*	45.2	0	35.7	19
34	50	0	21.9	28.1
35	51.6	0	16.3	32
36	45.8	0.5	34.8	18.9
37*	45.7	0	27.2	27.2
38	41.7	0.8	34.7	22.3
39*	43.7	0	32.2	24.1
41	45	0.8	27.9	26.4
42*	43.8	1.3	27.5	27.5
43	46.9	0	34.1	18.5
45	44.1	1.6	33.1	21.3
46	47.9	0	28.9	22.3
47*	36.4	0	38.4	25.3
48	46.7	0	34.3	19
49	45.8	0	35.6	18.6
50*	31.8	0	42.4	25.9
51	42.6	0	34.7	21.8
52	43	0	37.2	19.8
53*	41.4	0	39.1	19.5

Table 13. Quality of WIC Services

Agency	Excellent	Good	Fair	Poor
31	66.8	29.7	3.2	0.2
33*	78.6	20.2	1.2	0
34	83.1	15.6	1.3	0
35	75.8	23.5	0.7	0
36	78.6	20.4	0.5	0.5
37*	81.5	18.5	0	0
38	78.2	20.2	1.6	0
39*	80.2	18.7	1.1	0
41	85.3	14	0	0
42*	81.3	18.8	0	0
43	79.6	19	1.4	0
45	74.2	25	0.8	0
46	71.9	24	4.1	0
47*	90.9	9.1	0	0
48	81.7	18.3	0	0
49	65.2	30.9	3.9	0
50*	82.4	15.3	2.4	0
51	85.1	11.9	3	0
52	81.8	14.9	3.3	0
53*	92	8	0	0

Table 14. Participation in other food assistance programs

Agency	Food	Head Start	Food Bank	SHARE	CSFP	School	School	CACFP	FIP	Do Not
	Stamps					Lunch	Breakfast			Use
31	68.8	6.8	6.3	0	1.4	29.7	11.8	2.4	8.9	19.6
33*	59.5	11.9	7.1	0	0	32.1	19	4.8	4.8	26.2
34	66.5	9.8	7.3	0	0.6	25.6	16.5	3	14.6	18.9
35	70.6	13.7	9.8	0	0	30.1	17	0.7	23.5	20.3
36	69.8	10.9	5.4	0	0.5	31.2	17.8	4	15.8	18.8
37*	50.5	10.8	4.3	0	0	31.2	18.3	2.2	6.5	21.5
38	57.9	8.5	6.5	0.8	0	30	18.6	3.2	10.9	22.3
39*	44	13.2	2.2	0	0	37.4	14.3	1.1	3.3	35.2
41	58.1	8.5	10.1	1.6	0	34.9	17.1	3.1	5.4	18.6
42*	58.8	16.3	20	0	0	51.3	27.5	1.3	8.8	17.5
43	59.1	12.1	7.9	0	0.5	38.6	16.7	2.8	13.5	23.3
45	65.9	6.2	3.9	0.8	0	27.9	11.6	1.6	11.6	20.9
46	64.8	5.7	2.5	0	0	30.3	12.3	0.8	13.1	20.5
47	56	25	1	1	1	32	18	1	9	27
48	49.1	12.3	5.7	1.9	0.9	27.4	17	0	11.3	32.1
49	57.1	13.7	2.7	1.1	0	34.1	18.1	1.1	8.2	25.8
50*	57.6	20	3.5	0	0	34.1	16.5	1.2	7.1	22.4
51	71.6	9.8	18.6	0	0	28.4	9.8	2.9	5.9	17.6
52	71	8.9	0.8	0	0	35.5	12.9	1.6	7.3	21
53*	43.7	13.8	5.7	0	0	32.2	12.6	1.1	10.3	28.7

Table 15. WIC participant type in household

(* = <100 respondents)

Agency	Pregnant	Breastfeeding	Postpartum	Infant	Child
31	9.2	10.1	8.9	37.4	65.5
33*	7.1	8.3	2.4	32.1	72.6
34	17.7	10.4	12.8	34.8	68.9
35	21.6	5.2	7.2	35.9	66
36	10.9	10.9	6.9	34.2	66.8
37*	21.5	5.4	7.5	34.4	65.6
38	14.2	11.7	8.1	40.9	62.3
39*	9.9	9.9	5.5	27.5	78
41	12.4	8.5	10.1	35.7	65.9
42*	22.5	8.8	3.8	28.8	71.3
43	10.7	9.8	7	34.4	70.7
45	13.2	8.5	7.8	46.5	62.8
46	14.8	6.6	10.7	37.7	63.9
47	9	11	9	47	62
48	18.9	13.2	6.6	36.8	66
49	13.7	7.1	12.1	36.3	67
50*	12.9	9.4	4.7	30.6	69.4
51	22.5	12.7	3.9	29.4	67.6
52	12.1	7.3	6.5	39.5	66.1
53*	6.9	6.9	9.2	36.8	75.9

Table 16. Payment source for non-WIC foods

(* = <100 respondents)

Agency	Food Assistance	Cash	Check or Debit	Credit	Don't Have Money
31	67.4	55.6	26.6	5.1	3.4
33*	58.3	52.4	34.5	9.5	2.4
34	61.6	57.3	29.3	7.9	0.6
35	68.6	58.8	36.6	7.2	10.5
36	67.8	46	38.6	8.9	4
37*	50.5	50.5	35.5	5.4	0
38	55.5	50.6	36.8	8.9	0.8
39*	41.8	54.9	40.7	9.9	1.1
41	53.5	61.2	41.1	3.9	2.3
42*	55	52.5	45	13.8	0
43	58.6	54.4	43.3	7	1.4
45	61.2	61.2	33.3	4.7	3.9
46	63.1	51.6	34.4	4.1	2.5
47	54	47	33	2	2
48	48.1	52.8	40.6	5.7	0.9
49	49.5	62.6	36.8	6	2.2
50*	56.5	54.1	43.5	2.4	2.4
51	71.6	48	37.3	13.7	4.9
52	66.1	53.2	29	2.4	2.4
53*	57.5	48.3	43.7	6.9	2.3